CLAIMS

What is claimed is:

1. An isolated nucleic acid molecule comprising:
   a) a nucleic acid having a nucleotide sequence which encodes an amino acid sequence exhibiting at least 85% sequence identity to an amino acid sequence according to any one of SEQ ID NOS. 3, 5, 7, 10, 12, 14, 17, 19, 21, 24, 26, 28, 31, 34, 36, 38, 41, 43, 45, 48 and 49;
   b) a nucleic acid which is a complement of a nucleotide sequence according to paragraph (a);
   c) a nucleic acid which is the reverse of the nucleotide sequence according to subparagraph (a), such that the reverse nucleotide sequence has a sequence order which is the reverse of the sequence order of the nucleotide sequence according to subparagraph (a); or
   d) a nucleic acid capable of hybridizing to a nucleic acid according to any one of paragraphs (a) – (c), under conditions that permit formation of a nucleic acid duplex at a temperature from about 40°C and 48°C below the melting temperature of the nucleic acid duplex.

2. The isolated nucleic acid molecule according to claim 1, which has the sequence according to any one of SEQ ID NOS. 1, 2, 4, 6, 8, 9, 11, 13, 15, 16, 18, 20, 22, 23, 35, 27, 29, 30, 32, 33, 35, 37, 39, 40, 42, 44 and 46.

3. The isolated nucleic acid molecule according to claim 1, wherein said amino acid sequence comprises the sequence according to SEQ ID NOS. 3, 5, 7, 10, 12, 14, 17, 19, 21, 24, 26, 28, 31, 34, 36, 38, 41, 43, 45, 48 and 49.

4. The isolated nucleic acid molecule of claim 1, wherein said amino acid has the structure according to SEQ ID NO. 48 or 49.

5. A vector construct comprising:

a) a first nucleic acid having a regulatory sequence capable of causing transcription and/or translation in a plant; and

b) a second nucleic acid having the sequence of the isolated nucleic acid molecule according to any one of claims 1-4;

wherein said first and second nucleic acids are operably linked and wherein said second nucleic acid is heterologous to any element in said vector construct.

6. The vector construct according to claim 5, wherein said first nucleic acid is native to said second nucleic acid.

7. The vector construct according to claim 5, wherein said first nucleic acid is heterologous to said second nucleic acid.

8. A host cell comprising an isolated nucleic acid molecule according to any one of claims 1-4, wherein said nucleic acid molecule is flanked by exogenous sequence.

9. A host cell comprising a vector construct according to any one of claims 5-7.

10. An isolated polypeptide comprising an amino acid sequence exhibiting at least 85% sequence identity of an amino acid sequence according to any one of SEQ ID Nos. 3, 5, 7, 10, 12, 14, 17, 19, 21, 24, 26, 28, 31, 34, 36, 38, 41, 43, 45, 48 and 49, and capable of causing a plant to have an increased size or an increased number and size of rosette leaves as compared to a wild type-plant.

11. A method of introducing an isolated nucleic acid into a host cell comprising:

a) providing an isolated nucleic acid molecule according to any one of claims 1-4; and

b) contacting said isolated nucleic with said host cell under conditions that permit insertion of said nucleic acid into said host cell.

12. A method of transforming a host cell which comprises contacting a host cell with a vector construct according to any one of claims 5-7.

13. A method of modulating the flowering time or size of a plant, or the size or number of rosette leaves of a plant comprising transforming said plant with a nucleic acid molecule according to claim 1 or a vector according to claim 5.

14. A method of increasing the size of a plant comprising transforming said plant with a nucleic acid molecule according to any one of claims 1-4 or a vector according to any one of claims 5-7.

15. A method of increasing the size or number of rosette leaves of a plant comprising transforming said plant with a nucleic acid molecule according to any one of claims 1-4 or a vector according to any one of claims 5-7.

16. A method for increasing the size of a plant, or the size or number of rosette leaves, comprising transforming a plant with a nucleic acid molecule that codes for a polypeptide according to SEQ ID NO. 48 or 49.

17. A method for detecting a nucleic acid in a sample which comprises:
a) providing an isolated nucleic acid molecule according to any one of claims 1-4;
b) contacting said isolated nucleic acid molecule with a sample under conditions which permit a comparison of the sequence of said isolated nucleic acid molecule with the sequence of DNA in said sample; and
c) analyzing the result of said comparison.

18. A plant, plant cell, plant material or seed of a plant which comprises a nucleic acid molecule according to any one of claims 1-4 which is exogenous or heterologous to said plant or plant cell.

19. A plant, plant cell, plant material or seed of a plant which comprises a vector construct according to any one of claims 5-7.

20. A plant which has been regenerated from a plant cell or seed according to claims 18 or 19